



Features

- Lead free device (RoHS Compliant*)
- Protects 4 lines
- Low leakage current
- Low capacitance 3 pF Typ.

Applications

- Ethernet – 10/100/100 Base T
- Portable electronics
- Video/graphics card
- USB 2.0 interface
- FireWire

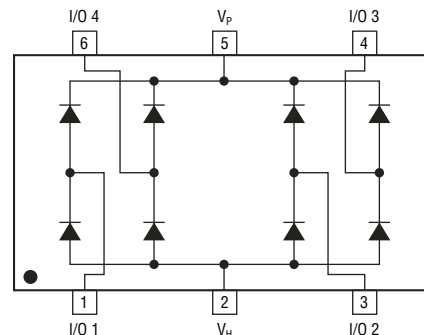
CDSOT23-SR724 – Steering Diode Array

General Information

The markets of portable communications, computing and video equipment are challenging the semiconductor industry to develop increasingly smaller electronic components.

Bourns offers Transient Voltage Suppressor Array diodes for Surge and ESD protection applications, in compact chip package SOT23-6 size format. Bourns® Chip Diodes conform to JEDEC standards, are easy to handle on standard pick and place equipment and their flat configuration minimizes roll away.

The Bourns® device will meet IEC 61000-4-2 (ESD), IEC 61000-4-4 (EFT) and IEC 61000-4-5 (Surge) requirements.



Electrical Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	Min.	Nom.	Max.	Unit
Peak Pulse Forward Current (t _p = 8/20 μs)	I _{PP}			12	A
Continuous Power Dissipation	P _{PC}			125	mW
Typical Forward Voltage (8/20 μs @ 25 °C, I _F = 1 A)	V _F		2		V
Repetitive Peak Reverse Voltage ¹	V _{RRM}			20	V
Reverse Leakage Current @ V _{RRM} ²	I _D			10	nA
Capacitance @ 0 V & 1 MHz	C _{J(SD)}		3		pF
Quiescent Supply Current @ 20 V ³	I _{RQ}			100	nA

Notes:

1. V_{RRM} is +V_{CC} for pin 5, -V_{EE} for pin 2. Pin 2 also represents ground for unidirectional applications.
2. +20 V from Pin 5 to 1, 5 to 4, 5 to 3, and 5 to 6. -20 V from Pin 2 to 1, 2 to 3, 2 to 4, and 2 to 6.
3. +20 V from Pin 5 to 2.

Thermal Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	Min.	Nom.	Max.	Unit
Operating Temperature	T _J	-55	+25	+150	°C
Storage Temperature	T _{STG}	-55	+25	+150	°C

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

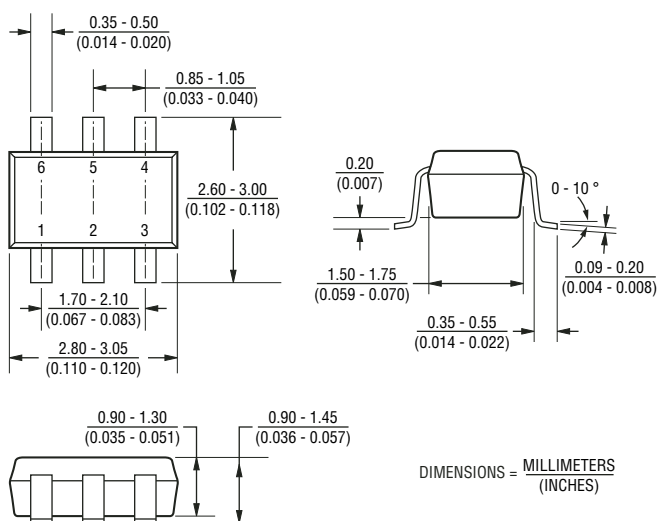
CDSOT23-SR724 – Steering Diode Array

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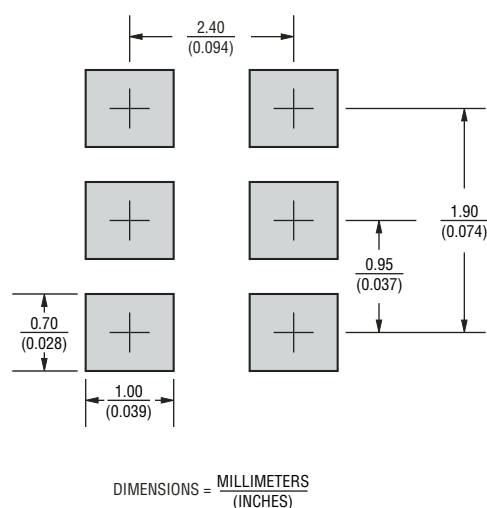
Mechanical Characteristics

This is a molded JEDEC SOT23-6 package with lead free 100 % Tin (Sn) on the lead frame. It weighs approximately 16 mg and has a flammability rating of UL 94V-0.

Product Dimensions



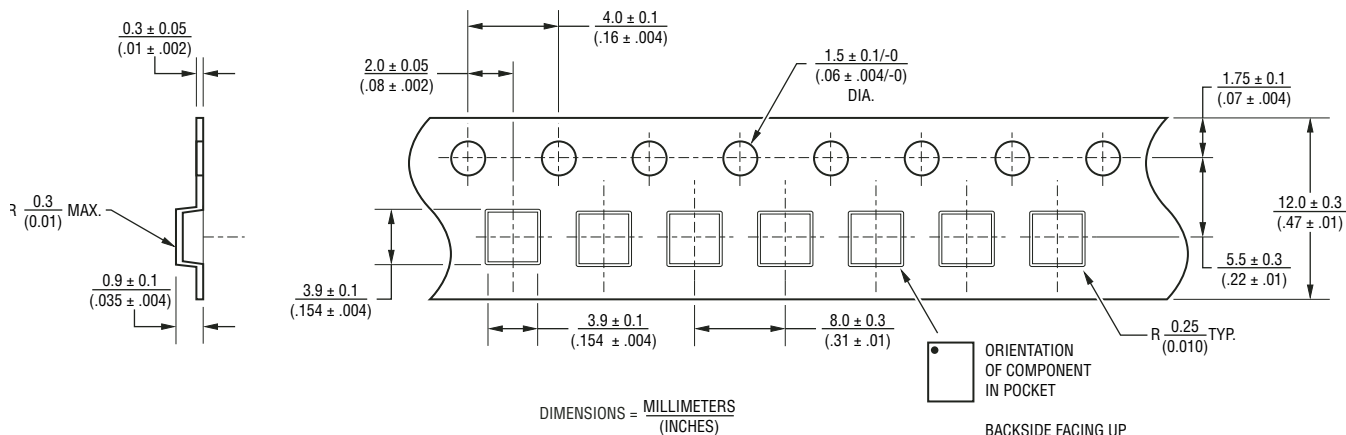
Recommended Footprint



Packaging Information

The product will be dispensed in Tape and Reel format (see diagram below).

TOP SIDE VIEW
(INTO COMPONENT POCKET)



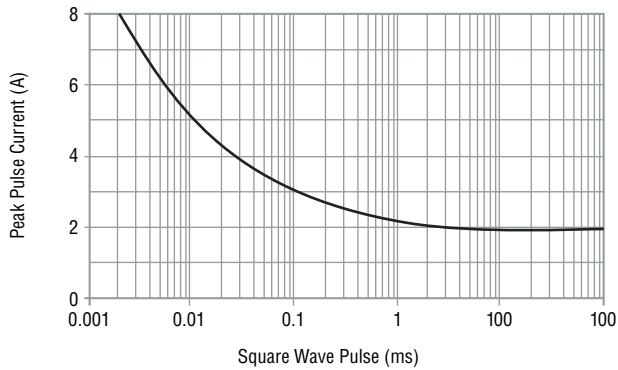
Devices are packed in accordance with EIA standard RS-481-A and specifications shown here.

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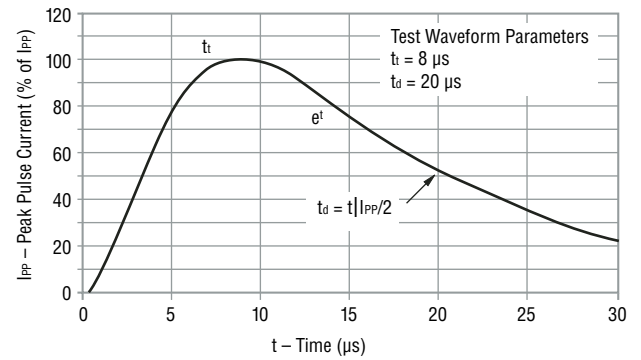
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Performance Graphs

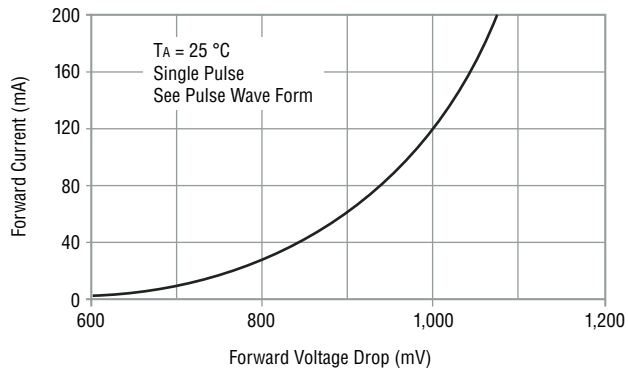
Non-Repetitive Peak Pulse Current Capability



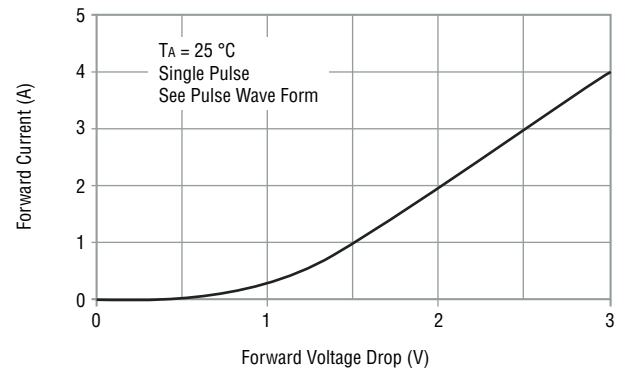
Pulse Wave Form



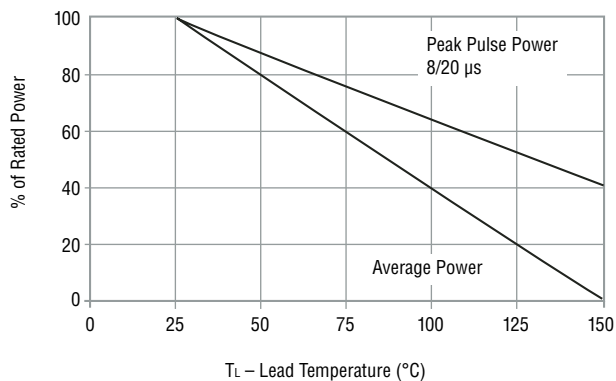
Typical Low Current Forward Voltage Drop



Typical High Current Forward Voltage Drop



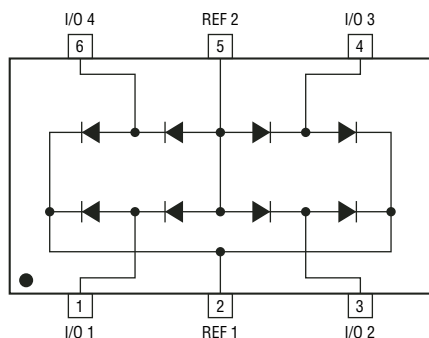
Power Derating Curve



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Block Diagram



How To Order

Common Code _____ **CD SOT23 - SR 724**
CD = Chip Diode
Package _____
SOT23 = SOT23-6 Package
Model _____
SR = Steering Diode
Model Number _____
724

Typical Part Marking

CDSOT23-SR724 **724**



Reliable Electronic Solutions

Asia-Pacific:

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